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What causes health?

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INTRODUCTION

Most doctors would be puzzled by such a question. Isn't health caused by avoiding illness? Don't we keep healthy by not smoking, not drinking and eating sensibly? Isn't it true to say that the behaviours and choices that lead us to avoid the causes of illness are what cause us to be healthy?

The World Health Organization defines health as a 'state of complete physical, mental and social wellbeing, not just the absence of disease or infirmity'.¹ This definition portrays health as a positive attribute, not just the absence of a negative one. In fact, the arguments that health is a positive attribute with specific causes have their origins in debates which stretch back to the middle of the last century. The problem is that such arguments have not had nearly as much attention as the arguments for prevention and treatment of disease.

Industrialised countries experienced rapid growth in life expectancy in the middle of the last century. Researchers began to try to explain the changing pattern of disease seen in these countries. Historical observation suggested that all societies go through three phases of health and illness as they modernise. In ancient times, when humans lived exclusively off the land and close to their animals, they experienced a phase of plagues and famine, during which mortality was high and life expectancy was perhaps not much more than 30 years. With industrialisation came a phase of 'receding pandemics', during which life expectancy rose from under 30 to about 50. The third phase in this transition arrived when technology was able, largely, to eradicate infectious disease as a major cause of premature death. Life expectancy increased rapidly and chronic disease affecting the elderly emerged to become the main health challenge.

This pattern of transition from a high birth rate, high mortality society to one of low birth rate, low mortality and prolonged life expectancy has been described as the 'epidemiological transition'.

BETTER HEALTHCARE OR SOCIAL CHANGE?

The growing significance and economic burden of chronic disease in the mid twentieth century provoked discussion as to the best way to meet the challenge of chronic disease. Lewis Thomas, an American physician, argued that medical science would produce cures.² Just as it had produced insulin, penicillin and vaccines which transformed the treatment and prevention of disease, it seemed obvious to Thomas that medical innovation would produce the same kind of 'magic bullets' to cure cancer and heart disease.

Others weren't so convinced. Thomas McKeown wrote a number of articles in the 1950s and 60s in which he considered the relative contributions of various factors to the decline in early mortality. He dismissed the importance of medical treatment, suggesting that a decline in mortality in industrialised countries was obvious long before significant medical advances were introduced.

McKeown also argued that traditional public health interventions such as providing clean water and sanitation were less significant than believed. He pointed out that, for example, water-borne infections such as cholera contributed relatively little to premature mortality, unlike airborne infections such as tuberculosis. He thought that 'the rise of population was due primarily to the decline of mortality and the most important reason for the decline was an improvement in economic and social conditions'. McKeown also felt that one of the most important social factors contributing to the decline in mortality was improved diet.³

McKeown's dismissal of the importance of healthcare in improving health came at a time when real concerns were beginning to be expressed about the increasing costs of health services. A debate began as to the relative importance of improving health by providing more healthcare and making it more effective or through greater attention to the social determinants of health. McKeown's ideas came under intense scrutiny and some accused him of pursuing ideas based less on evidence than ideology.⁴

In retrospect, it seems obvious that improving the effectiveness of healthcare and improving socioeconomic conditions in the population are both important. However, given that it is easier to measure the effectiveness of a defined treatment on an individual than it is to assess the effect of social change across a population, medical science has always had greater interest in healthcare.

AN ALTERNATIVE VIEW

In the 1960s, ideas as to how health might be caused by the psychosocial environment were beginning to emerge. In 1966, Rene Dubos, a pathologist and ecologist, wrote *Man adapting*, a book in which he argued that 'each period and each type of civilization will continue to have its burden of diseases created by the unavoidable failure of biological and social adaptation to counter new environmental threats'.⁵ Dubos' central argument was that health was not determined solely by exposure to adverse environments or disease-causing organisms but was also influenced by the way in which individual humans responds to those challenges.

Aaron Antonovsky, an American sociologist and anthropologist, further developed the idea that it is our response to external challenge that shapes the way we create health. He was interested in the relationship between stress and cultural tradition. In a series of studies summarised in his book *Health, stress and coping*, he suggested mechanisms that might link poverty and poor health.⁶ Rather than just attribute the relationship to poor diet and environmental conditions, he and colleagues tried to address the question 'what are the stressors in the lives of the poor that underlie the brute fact that, with regard to everything related to health, illness and patienthood, the poor are screwed'.

Antonovsky realised that the group of people referred to as the 'poor' were not homogeneous in the way they responded to life's challenges. When two people were confronted by the same stressful situation, and one had the wherewithal to respond to the situation successfully and the other didn't, the outcome in terms of health would be different.

Antonovsky posed the insightful question: 'Given that all people living in poor socioeconomic conditions have broadly the same experiences, why do some stay healthy while others don't?' Eventually he concluded that a healthy outcome depended on the extent to which an individual had acquired a 'sense of coherence'. This he defined as the ability to make sense of and manage one's external environment, and the degree to which one had the confidence and determination to meet the challenges posed by the external world. He called this world view 'a sense of coherence'. Unless the individual had confidence that the world round about him was comprehensible,

manageable and meaningful, Antonovsky said, the individual would experience a state of chronic stress.

Many studies have now shown the relationship between poor socioeconomic conditions and elevated markers of stress. Advances in understanding the biological consequences of stress show how it is linked to increased risk of many of the chronic illnesses that have emerged in modern society.

By asking how health is created rather than dwelling on how disease can be prevented, Antonovsky offered a more rational and scientifically valid alternative to the healthcare/social determinants dichotomy. By conceptualising health as a spectrum with complete health (ease) at one end and complete lack of health (dis-ease) at the other, he offered a way to reconcile the two camps. In particular, his theories made it clear that, in the present state of human development, it is not sufficient to view the social determinants of health as simply those events that are external to the individual. His theory points to the crucial importance of the way the individual has learned to engage with and adapt to external events as a key determinant of that person's wellbeing. Much of the chronic disease we now deal with may not be due solely to external influences but to our physical and psychological responses to those influences.

The fact is that our sense of wellbeing depends on external events, but it also depends on how effectively we respond to them. In 2011, Huber and colleagues offered an alternative definition of health. 'Just as environmental scientists describe the health of the earth as the capacity of a complex system to maintain a stable environment within a relatively narrow range, we propose the formulation of health as the ability to adapt and to self manage.'⁷

LESSONS FOR PUBLIC POLICY

If a feeling of being in control of our lives and being able to make decisions for ourselves is an important determinant of how individuals create health, then public policy should, as an underpinning principle, seek to enhance this sense of being able to control one's life. Too often, however, we organise public bodies to do things to people rather than work with them. Our present approach to people in difficulty focuses on their problems, needs and deficiencies. We define them as being 'deprived' and see their health problems as being due to their health-damaging behaviours. We design services to fill the gaps in peoples' lives and fix their problems. As a result, individuals and communities can feel disempowered. People become passive recipients of services rather than active agents in their own lives.

In adopting this approach, we undermine their sense of control and encourage passivity. This is completely

counter to the evidence that supports the need to develop the personal assets which individuals and communities harbour, often unrecognised, and which allow them to participate fully in the creation of wellbeing for themselves and their neighbours. This process has been termed 'salutogenesis'.⁸

This salutogenic perspective, therefore, leads us to the conclusion that it is not enough to improve material wellbeing in order to improve inequalities in health. We also need to pay attention to those psychological resources that allow people to build relationships and establish social networks. We need to ensure opportunities for people to feel their lives are meaningful. Without such internal capacity, attempts to narrow health inequalities simply by improving external social circumstances are unlikely to be very effective.

So what is the basic cause of health inequality?

Widening health inequality, then, is a reflection of inequality in access to those important determinants of

the ability to feel safe and in control of one's life in difficult times. Inequality in a society is primarily a consequence of inequality in the distribution of those resources in society that allow children to flourish in a safe and supportive environment. Nurturing environments for children and the social, economic and environmental resources that allow parents to create safe and stable environments for their families are essential if we are to narrow the gap in health, in educational attainment and in offending behaviour. By providing such opportunities early in life, inequalities across many aspects of society are likely to be improved.

There is no doubt that avoiding health-damaging behaviours makes sense. However, creating health is a proposition at least as sensible and as practical as simply avoiding disease. Perhaps health professionals should contribute to the search for ways to support the creation of health rather than simply focusing on treating or preventing disease.

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